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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,725	05/08/2001	Bernard Yeh	2207/11508	3637

7590 09/13/2004

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EXAMINER	
BENGZON, GREG C	
ART UNIT	**PAPER NUMBER**
2144	

DATE MAILED: 09/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/851,725	YEH ET AL.	
	Examiner	Art Unit	
	Greg Bengzon	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 May 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-22 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 May 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892) ✓
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This application has been examined. Claims 1-22 are pending .

Priority

No claim priority has been made in this application.

The effective filing date for the subject matter defined in the pending claims in this application is 5/8/2001.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Figure 1 Item 19 and Item 25, Figure 5B. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a) because they fail to show Figure 1 Item 17 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 9-14,17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Fletcher et al. (US Patent 6269401) hereinafter referred to as Fletcher.

With respect to Claims 1, 3, 9, 11, and 17 Fletcher discloses the method, set of instructions, and system for testing a computer system to be operated in a multi-computer environment, comprising: executing server code at a computer system under test; executing client code at said computer system under test; and calculating performance data for said computer system under test. Furthermore, Fletcher discloses the method, set of instructions, and system for testing a computer system to be operated in a multi-computer environment, comprising: executing server code at a computer system under test according to a multicomputer communication protocol; executing client code on said computer system under test according to said multicomputer communication protocol; and calculating performance data for said computer system under test operating as one of a server and a client. (See Fletcher Column 3 Lines 30-60, Figure 1 Column 5 Lines 15-50, Figure 2 Column 5 Lines 55-67).

With respect to Claims 2 and 10, Fletcher discloses the method and set of instructions of Claims 1 and 9 for tracking an execution time for each of said threads by a processor in said computer system under test; and tracking a number of transactions completed between the execution of server code and the execution of client code wherein said performance data is based on said number of transactions completed over

a period of time. (See Fletcher Column 20, Lines 30-60, Column 23 Lines 45-65, Column 24 Lines 1-67).

With respect to Claims 4,12 and 18, Fletcher discloses the method, set of instructions and system of Claims 3,11, and 17 wherein said server code and client code includes a number of threads, the method further comprising: tracking an execution time for each of said threads by a processor in said computer system under test. (See Fletcher Column 20, Lines 30-60, Column 23 Lines 45-65, Column 24 Lines 1-67).

With respect to Claims 5,13, and 19, Fletcher discloses the method, set of instructions and system of Claims 4, 12, and 18 wherein said multicomputer communication protocol defines transactions between said server and said client, the method further comprising: tracking a number of transactions completed between the execution of server code and the execution of client code. (See Fletcher Column 20, Lines 30-60, Column 23 Lines 45-65, Column 24 Lines 1-67).

With respect to Claims 6,14 and 20, Fletcher discloses the method, set of instructions and system of Claims 5, 13, and 19 wherein said performance data is based on said number of transactions completed over a period of time. (See Fletcher Column 24, Lines 5-18, Lines 30-50)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7,15, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher et al. (US Patent 6269401) hereinafter referred to as Fletcher, in view of Cota-Robles (US PG Publication 2001/0056456).

With respect to Claims 7,15, and 21, Fletcher discloses the method, set of instructions and system of Claims 6, 14, and 20 wherein said performance data is based on said number of transaction completed over said period of time. (See Fletcher Column 24, Lines 5-18, Lines 30-50, Column 25 Lines 1-45)

However Fletcher does not disclose any teachings regarding a scaling factor and said performance data being modified by a scaling factor.

Cota-Robles discloses a scaling factor that is calculated and applied as a characteristic or 'execution state indicator' or 'dynamic priority indicator' of a thread process. The scaling factor can be calculated as a positive scaling factor or a negative scaling factor, depending on the performance data measurements taken for a particular thread. (Page 2 Paragraph 13,Page 3 Paragraph 33, Page 5 Paragraphs 54-56).

Fletcher and Cota-Robles are analogous art because they are presenting solutions for measuring thread execution data and using the performance data for

calculations that describe characteristics of thread execution dynamics in a computer system environment.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to apply the concept of a scaling factor taught by Cota-Robles and use the scaling factor to modify the performance data measured by Fletcher.

The suggested motivation for doing so would have been to present a logical means for comparing performance testing results with relative atomicity, consistency, and isolation. Furthermore the scaling factor allows the test conditions to be adjusted accordingly in order to simulate or predict performance under other testing scenarios.

Therefore it is respectfully suggested that it would have been obvious to combine the teachings of Cota-Robles with the method, set of instructions and system described by Fletcher for the benefit of accurate and beneficial performance testing data to obtain the invention as specified in Claims 7, 15, and 21.

Claims 8,16, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher et al. (US Patent 6269401) hereinafter referred to as Fletcher, in view of Cota-Robles (US PG Publication 2001/0056456).

With respect to Claims 8,16, and 22, Fletcher discloses substantially the method, set of instructions and system of Claims 7, 15, and 21 as described the rejection for Claims 7, 15, and 21. Fletcher discloses measuring the total execution time for both

client and server threads (Column 7 Lines 5-67, Column 8 Lines 25-30) and measuring one of an execution time for said server threads and an execution time for said client threads (Column 20 Line 30-60).

However Fletcher does not disclose any teachings regarding a scaling factor, where said scaling factor is a total execution time for both client and server threads divided by one of an execution time for said server threads and an execution time for said client threads.

Cota-Robles discloses a scaling factor that is calculated and applied as a characteristic or 'execution state indicator' or 'dynamic priority indicator' of a thread process. The scaling factor can be calculated as a positive scaling factor or a negative scaling factor, depending on the performance data measurements taken for a particular thread. (Page 2 Paragraph 13,Page 3 Paragraph 33, Page 5 Paragraphs 54-56). Cota-Robles teaches of a scaling function having linear dependencies wherein said scaling function is expressed as a ratio between a sum of the total occurrence for a unit of measurement data and a singular occurrence of a unit of measurement data. (Page 5 Paragraphs 49-50)

Fletcher and Cota-Robles are analogous art because they are presenting solutions for measuring thread execution data and using the performance data for calculations that describe characteristics of thread execution dynamics in a computer system environment.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to apply the concept of a scaling factor as taught by Cota-Robles, determine a suitable scaling function, calculate the scaling factor and use the scaling factor to modify the performance data measured by Fletcher. The scaling function can be expressed as a ratio between the total execution time for both client and server threads divided by one of an execution time for said server threads and an execution time for said client threads.

The suggested motivation for doing so would have been to present a logical means for comparing performance testing results with relative atomicity, consistency, and isolation. Furthermore the scaling factor allows the test conditions to be adjusted accordingly in order to simulate or predict performance under other testing scenarios.

Therefore it is respectfully suggested that it would have been obvious to combine the teachings of Cota-Robles with the method, set of instructions and system described by Fletcher for the benefit of accurate and beneficial performance testing data to obtain the invention as specified in Claims 7, 15, and 21.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to the enclosed PTO-892 form for details.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Bengzon whose telephone number is (571) 272-3944. The examiner can normally be reached on Mon. thru Fri. 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on (571) 272-3925. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GCB

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